13/16

SHEET OF

GEOTECHNICAL UNIT FIELD SCOUR REPORT

PROJECT: *8.2970901* TIP NO.: *B-4180* COUNTY: *MACON*

DESCRIPTION(1): *SR-1613 OVER CLEAR CREEK*

◆ ***INFORMATION ON EXISTING BRIDGES*** Information obtained from ☒ Field Inspection
☐ Microfilm (Reel: Position:)
☒ Other *HYDRO*

COUNTY BRIDGE NO. *BR-323* BRIDGE LENGTH *35.5'* NO. BENTS *2* NO. BENTS IN: CHANNEL *2* FLOODPLAIN *2*

FOUNDATION TYPE: *CONCRETE SLAB FOOTING WITH TIMBER POST PILES & SILLS*

EVIDENCE OF SCOUR(2):

ABUTMENTS OR END BENT SLOPES: *EB1-B CURRENTLY HAS EXPOSED 6"-12" OF THE SLAB. NO EVIDENCE OR UNDERMINING OF THE SLAB*

INTERIOR BENTS: *N/A*

CHANNEL BED: *MINOR MEANDERS*

CHANNEL BANKS: *NONE OBSERVED*

◆ ***EXISTING SCOUR PROTECTION:***

TYPE(3): *NEW TIMBER ABUTTMENTS & WING WALLS.*

EXTENT(4): *8-10' WOODEN WING WALLS*

EFFECTIVENESS(5): *GOOD BUT RECIENT RAINS HAVE WASHED SOIL OUT FROM BEHIND THE WING WALLS, NOT FROM RISING WATER FROM THE CREEK.*

OBSTRUCTIONS(6) (DAMS, DEBRIS, ETC.): *NONE OBSERVERD*

◆ ***DESIGN INFORMATION***

CHANNEL BED MATERIAL(7) (Sample Results Attached): *SAND AND GRAVEL UP TO 1'.*

CHANNEL BANK MATERIAL(8) (Sample Results Attached): *BANK UPSTREAM HAS BEEN PLOWED OR REMOVED BY MAN. DOWN STREAM THE CREEK RUNS UP AGAINST THE MOUNTAIN.*

FOUNDATION BEARING MATERIAL(9): *SWR*

CHANNEL BANK COVER(10): *FIELD UPSTREAM, MOUNTAIN & WOODSDOWNSTREAM*

FLOOD PLAIN WIDTH(11): *100'+/-*

FLOOD PLAIN COVER(12): *FIELD UPSTREAM, MOUNTAIN & WOODSDOWNSTREAM*

STREAM IS: ☒ DEGRADING ☐ AGGRADING (13)

◆ ***DESIGN INFORMATION CONT.***

OTHER OBSERVATIONS AND COMMENTS:

SHEET OF

CHANNEL MIGRATION TENDENCY(14): *IF ANY, TOWARDS SW (EB1-B SIDE)*

GEOTECHNICAL ADJUSTED SCOUR ELEVATIONS (15):

Bent	*Boring*	*Grnd Elev*	*Weathered Rock Elev*	*Q100 Scour*	*Q100 ScourElev*	*Adjusted Scour Elev.*	*Scour Adjustment*
EB-1	*A*	*2509.3*	*2501*	*9.4'*	*2499.9*	*2499.9*	*No Change*
	B	*2508.7*	*2497*	*9.4'*	*2499.3*	*2499.3*	*No Change*
EB-2	*C*	*2510.6*	*2496*	*13.9'*	*2496.7*	*2496.7*	*No Change*
	B	*2510.7*	*2505*	*13.9'*	*2496.8*	*2504*	*7.2' up*

Note: In the chart above, the "C" hole, normally in the center of the bent, falls on the left side of the existing bridge.

REPORTED BY: *CCM* DATE: *11/25/03*

INSTRUCTIONS

(1) GIVE THE DESCRIPTION OF THE SPECIFIC SITE GIVING ROUTE NUMBER AND BODY OF WATER CROSSED.
(2) NOTE ANY EVIDENCE OF SCOUR AT THE EXISTING END BENTS OR ABUTMENTS (UNDERMINING, SLOUGHING, SCOUR LOCATIONS DEGRADATIONS, ETC.)
(3) NOTE ANY EXISTING SCOUR PROTECTION (RIPRAP, ETC.)
(4) DESCRIBE THE EXTENT OF ANY EXISTING SCOUR PROTECTION.
(5) DESCRIBE WHETHER OR NOT THE SCOUR PROTECTION APPEARS TO BE WORKING.
(6) NOTE ANY DAMS, FALLEN TREES, DEBRIS AT BENTS, ETC.
(7) DESCRIBE THE CHANNEL BED MATERIAL; A SAMPLE SHOULD BE TAKEN FOR GRAIN SIZE DISTRIBUTION, ATTACH LAB RESULTS.
(8) DESCRIBE THE CHANNEL BANK MATERIAL; A SAMPLE SHOULD BE TAKEN FOR GRAIN SIZE DISTRIBUTION, ATTACH LAB RESULTS.
(9) DESCRIBE THE FOUNDATION BEARING MATERIAL
(10) DESCRIBE THE BANK COVERING (GRASS, TREES, RIPRAP, NONE, ETC.)
(11) GIVE THE APPROXIMATE FLOOD PLAIN WIDTH (ESTIMATE).
(12) DESCRIBE THE FLOOD PLAIN COVERING (GRASS, TREES, CROPS, ETC.)
(13) CHECK THE APPROPRIATE SPACE AS TO WHETHER THE STREAM IS DEGRADING OR AGGRADING.
(14) DESCRIBE THE POTENTIAL OF THE BODY OF WATER TO MIGRATE LATERALLY DURING THE LIFE OF THE BRIDGE (APPROXIMATELY 100 YEARS).
(15) GIVE THE GEOTECHNICAL ADJUSTED SCOUR ELEVATION EXPECTED OVER THE LIFE OF THE BRIDGE (APPROXIMATELY 100 YEARS). THIS CAN BE GIVEN AS AN ELEVATION RANGE ACROSS THE SITE, OR ON A BENT BY BENT BASIS WHERE VARIATIONS EXIST. DISCUSS RELATIONSHIP BETWEEN THE HYDRAULICS THEORETICAL SCOUR AND THE GEOTECHNICAL ADJUSTED SCOUR ELEVATION. IF THE GEOTECHNICAL ADJUSTED SCOUR ELEVATION IS DEPENDENT ON SCOUR COUNTER MEASURES, EXPLAIN. (RIPRAP ARMORING ON SLOPES, ETC.) THE GEOTECHNICAL ADJUSTED SCOUR ELEVATION IS BASED ON THE ERODABILITY OF MATERIALS WITH CONSIDERATION FOR JOINTING, FOLIATION, BEDDING ORIENTATION AND FREQUENCY; CORE RECOVERY PERCENTAGE; PERCENT RQD; DIFFERENTIAL WEATHERING; SHEAR STRENGTH; OBSERVATIONS AT EXISTING STRUCTURES; OTHER TESTS DEEMED APPROPRIATE; AND OVERALL GEOLOGIC CONDITIONS AT THE SITE.